

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-003532**Date Inspected:** 26-Jul-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Keng Chan**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower/OBG**Summary of Items Observed:**

On this date, Caltrans Office of Structure Materials (OSM) Quality Assurance Inspector (QA) Raymond Lara was present at jobsite in Zhenhua Port Machinery Company facility on Changxing Island, China for the purpose of observing and monitoring the fabrication of the OBG/Tower.

**Bay 1**

The Quality Assurance Inspector observed ZPMC utilizing a milling machine in the beveling process on skin plates SA173.

The Quality Assurance Inspector observed ZPMC performing grinding and air carbon arc operations on various longitudinal stiffeners weld runoff tabs.

The Quality Assurance Inspector observed ZPMC utilizing chalk layout lines in an effort to aid in the fit up on longitudinal stiffener to skin plate B South Tower Assembly.

**Bay 2****Longitudinal Stiffener**

The Quality Assurance Inspector observed ZPMC welder 056975, utilizing the submerged arc welding process on complete joint penetration weld number SSDI-SA80 C/Z 13A on longitudinal stiffener splice. The Quality Assurance Inspector observed ZPMC Quality Control Personnel record parameters and verify preheat temperatures. The welding parameters observed by the Quality Assurance Inspector appeared to be within welding procedure specification WPS-B-T-2221-B-V3C-5-1.

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The Quality Assurance Inspector observed ZPMC in process of performing fit up operations on longitudinal stiffeners to skin plate E East Tower Assembly.

The Quality Assurance Inspector observed ZPMC in process of positioning skin plate A East Tower Assembly in the welding gantry.

Bay 3 July 26

The Quality Assurance Inspector observed ZPMC grinding and performing flux core arc welding (FCAW) on visual weld repairs on Orthotropic Box Girders (OBG) DP-108-001, DP-353-001, DP-135-001, and DP-216-001.

The Quality Assurance Inspector performed a random visual observation on Orthotropic Box Girder (OBG) DP-084-001. The area observed by the Quality Assurance Inspector appeared to meet contract requirements.

The Quality Assurance Inspector performed 10% random magnetic particle testing verification on Deck Panels. The Quality Assurance Inspector performed the testing on the following Deck Panels; DP-108-001, DP-299-001, DP-432-001, and DP326-002. See Caltrans report TL-6028 Magnetic Particle Test Report, dated July 26, 2008 for additional information.



### Summary of Conversations:

No relevant conversations on this date.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Joshua Ishibashi, (707) 649-5453, who represents the Office of Structural Materials for your project.

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**Inspected By:** Lara, Raymond

Quality Assurance Inspector

**Reviewed By:** Lanz, Joe

QA Reviewer

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